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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,236	10/07/2005	Tetsuya Watanabe	121036-0088	6297

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07/09/2008

EXAMINER

MCCLENDON, SANZA L

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

07/09/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/552,236

Applicant(s)

WATANABE ET AL.

Examiner

Sanza L. McClendon

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2008 and 28 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/003)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. In response to the Amendment received on 4/03/2008 and 1/28/2008, the examiner has carefully considered the amendments. The examiner acknowledges the cancellation of claim 4 and the addition of new claims 25-26. The claim rejection under 35 U.S.C. § 112, 2nd paragraph for claims 4, 10-11 and 22 have been overcome by the amendment and has hereby been withdrawn for consideration. The examiner acknowledges Exhibit A, sent 1/28/2008, which according to applicant is machine translation of two pages from the Watanabe et al (2003/105320) cited prior art.

Response to Arguments

2. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 and 5-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al (JP 2003-105320) in view of Otake et al (JP 08-092342).

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5. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

JP'320 sets forth liquid compositions for making gaskets used in HDD application via methods using an automated X-Y-Z coating robot. Said composition comprises a liquid carbonate modified polyurethane acrylate, a diluent (acrylic monomers of formulas 1 and/or 2), and a photoinitiator. Said polyurethane acrylate is obtained by the reaction a polycarbonate polyol having a molecular weight of 1K to 3K, a diisocyanate compound, which can be aliphatic, alicyclic and/or aromatic, a polyhydric alcohol having (meth) acrylic groups. Per examples, there is an addition of 5.0 weight percent of a trivalent alcohol—a polyether diol obtained from trimethylol propane. Per examples, JP'320 sets forth addition of the photoinitiator prior to the terminal (meth) acrylating reaction and the addition of a hindered phenolic antioxidant (Irganox 1010, mw. 1178). Regarding claims 3 and 4 (2nd part); this method step is deemed to be an obvious variant of claim 2, which is within the skill of an ordinary artisan. The polycarbonate can be added in amounts of 100 parts by weight, the diisocyanate can be added in amounts from at least 20 parts by weight (see examples), the acrylic monomers can be added in amounts from 30 to 300 parts by weight, the polyether triol/polyol can be added in amounts from at least 5 parts by weight (see examples) and the photoinitiator can be added in amounts from 0.1 to 5 parts by weight. The viscosity of the polyurethane resin composition is disclosed as being from 100,000 to 1, 500, 00 mPa*s. The process in making the gasket includes a high temperature step, which is carried out within a 80 to 180 °C temperature range and a irradiation step for curing the polyurethane composition—see [0029] and the examples. Watanabe et al does not expressly teach the addition of a compound such as component (E) in the instantly written claims, it is known in the prior art to add dimethacrylate compounds of alkylene glycol, wherein the alkylene group is substituted by a lower alkyl group having 1 to 5 carbon atoms, such as found in JP 08-092342 to Otaka et al.

Otaka et al teaches radiation curable resin compositions comprising at least one polycarbonate urethane (meth) acrylate, another urethane (meth) acrylate which can be a polycarbonate urethane (meth) acrylate and from 1 to 93 wt% of a reactive diluent. Otaka et al teaches the addition of the reactive diluent helps to tailor properties such as hardness and pliability, as well as, resistance to contaminants. Said reactive diluents according to Otaka et al can be polyfunctional in nature and include alkylene substituted alkylene glycol dimethacrylates,

such as neopentyl glycol dimethacrylate—see sections [0048] and [0050]. JP'320 and Otaka et al are analogous art because they are from the same field of endeavor that is radiation curable polycarbonate polyurethane methacrylates. Therefore it would have been obvious to a skilled artisan to use the reactive diluent of Otaka et al in the composition of JP'320. The motivation would have been a reasonable expectation of tailoring the viscosity as well as tailoring the hardness, pliability, and chemical resistance properties of the cured product in the absence of evidence to the contrary and/or unexpected results.

Regarding claims 25-26, it appears that JP'320 teaches terminating the reaction after the addition of the photoinitiator and the hindered phenol-based antioxidant. Note that the courts have upheld the "critical" order of mixing ingredients is not patentable—see *In re Hampel*, 1947 C.D. 473. As well as, upholding the mere mixing of ingredients to form a new composition is not patentable—see *In re Beckett*, 1973 C.D. 386. It is deemed that the combined references render the instantly claimed invention obvious.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

//Sanza L McClendon//

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Primary Examiner

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SMc